Reid, C., D.J. Rosen, R. Carter, and P.M. Peterson. 2015. *Eragrostis plana* (Poaceae) new to Texas. Phytoneuron 2015-5: 1–3.
Published 1 February 2015. ISSN 2153 733X

# *ERAGROSTIS PLANA* (POACEAE) NEW TO TEXAS

**CHRISTOPHER REID**
Louisiana Department of Wildlife & Fisheries
2000 Quail Drive
Baton Rouge, Louisiana 70808
* Author for correspondence: creid@wlf.la.gov

**DAVID J. ROSEN**
Department of Biology
Lee College
P.O. Box 818
Baytown, Texas 77522-0818

**RICHARD CARTER**
Department of Biology
Valdosta State University
Valdosta, Georgia 31698-0015

**PAUL M. PETERSON**
Department of Botany
National Museum of Natural History, Smithsonian Institution
Washington, DC. 20013-7012

## ABSTRACT

*Eragrostis plana* (South African love grass) is reported new to Texas, where it was found on a coastal prairie remnant on the east side of the Houston metroplex. This species is native to southern Africa.

*Eragrostis plana* Nees, a native of southern Africa (Clayton 1974; Gibbs Russell et al. 1990; Peterson 2003), was initially reported as introduced in North America from South Carolina by Gould and Lonard (1970), who cited specimens collected near the Santee wool combing mill in Berkeley County, South Carolina. Many exotic weeds have been found near wool combing mills because seeds are easily transported from their source in the wool (McCormick 2005). *Eragrostis plana* was also reported from around sheep and cattle lots in Florence County, South Carolina (Peterson 2003) and it has been introduced in Brazil, where it is a troublesome weed of pasture, rangeland, and roadsides (Boechat & Longhi-Wagner 2001; Zenni & Ziller 2011).

In July of 2012 we collected *Eragrostis plana* (Fig. 1) from Deer Park Prairie, a coastal prairie remnant in southeastern Texas on the east side of the Houston metroplex. The plants were collected from the lower edge of a pimple mound — pimple mounds are small soil mounds, possibly of aeolian origin (Seifert et al. 2009), that are characteristic features of coastal prairies having Alfisol soils. The abundance of the weedy *Gaura longiflora* on many pimple mounds on the site may indicate past mechanical disturbance. Disturbance could have resulted from scraping by hay mowing equipment (Butler 1979), congregation of cows (C. Reid, personal observation), or some other source. Our visit to Deer Park Prairie was brief and we did not recognize *E. plana* at the time of collection. It appeared to be infrequent, but we did not carefully determine its abundance and distribution on the site. How *E. plana* was distributed to Deer Park Prairie is not known and is open to conjecture. Our collections represent the first for this species in Texas (Correll & Johnston 1970; Hatch et al. 1990; Jones et al. 1997; Turner et al. 2003; NatureServe 2014; USDA, NRCS 2014).

cm 0 1 2 3 4 5 6 7 8 9 10
copyright reserved
Smithsonian Institution
US
! P. M. Peterson 2012
Smithsonian Institution
POACEAE
U.S.A., TEXAS
Harris County
Eragrostis plana Nees
Small (ca. 50-acre) coastal prairie remnant in the town of Deer Park, about .5 km NE of the intersection of Spencer Hwy. and Luella Ave. Infrequent in very rich native plant community dominated by Paspalum plicatulum, Schizachyrium scoparium, Muhlenbergia capillaris, and Spartina spartinae.
GPS - N29° 40' 12.8", W95° 06' 33.4" (WGS 84)
D.J. Rosen 5763
R. Carter, C. Reid
27 July, 2012
UNITED STATES
3653869
NATIONAL HERBARIUM
01186764

Figure 1. *Eragrostis plana* collected from Deer Park Prairie in southeastern Texas in July 2012.

Voucher specimens: **USA. Texas**. Harris Co.: Small (ca. 50-acre) coastal prairie remnant in the town of Deer Park, about 0.5 km NE of the intersection of Spencer Hwy and Luella Ave., 29.671156 N, -95.108034 W, infrequent in a very rich native plant community dominated by *Paspalum plicatulum*, *Schizachyrium scoparium*, *Muhlenbergia capillaris*, and *Sporobolus spartinus* [=*Spartina spartinae*], 27 Jul 2012, *D.J. Rosen 5763 with Carter and Reid* (BRIT, TEX, US), *C. Reid 8143 with Carter and Rosen* (LSU).

## ACKNOWLEDGEMENT

We thank Flo Hannah with Houston Audubon Society for arranging access to Deer Park Prairie.

## LITERATURE CITED

Boechat, S.C. and H.M. Longhi-Wagner. 2001. O gênero *Eragrostis* (Poaceae) no Brasil. Iheringia, Bot. 55: 23–169.

Butler, A.C. 1979. Mima mound grasslands of the upper coastal prairie of Texas. M.S. thesis. Texas A & M University, College Station.

Clayton, W.D. 1974. 56. *Eragrostis*. Pp. 188–244 in R.M. Polhill (ed.). Gramineae (Part 2), Flora of Tropical East Africa. Crown Agents for Oversea Governments and Administrations, London.

Correll, D.S. and M.C. Johnston. 1970. Manual of the Vascular Plants of Texas. Texas Research Foundation, Renner.

Gibbs Russell, G.E., L. Watson, M. Koekemoer, L. Smook, N.P. Barker, H.M. Anderson, and M.J. Dallwitz. 1991. Grasses of southern Africa. Mem. Bot. Surv. South Africa 58: 1–437.

Gould, F.W. and R.I. Lonard. 1970. *Eragrostis plana* in South Carolina. Rhodora 72: 188.

Hatch, S.L., K.N. Gandhi, and L.E. Brown. 1990. Checklist of the Vascular Plants of Texas. Texas Agric. Exp. Sta. Bull. MP-1655.

Jones, S.D., J.K. Wipff, and P.M. Montgomery. 1997. Vascular Plants of Texas: A Comprehensive Checklist Including Synonymy, Bibliography, and Index. Univ. of Texas Press, Austin.

McCormick, C.A. 2005. Wool-gathering in the herbarium. North Carolina Botanical Garden Newsletter, September-October 2005.

NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life. Version 7.1. NatureServe, Arlington, Virginia. <http://www.natureserve.org/explorer>

Peterson, P.M. 2003. *Eragrostis* (Poaceae). Pp. 65–105, in Flora of North America North of Mexico. Vol. 25, part 2. Oxford Univ. Press, New York and Oxford.

Seifert, C.L., R.T. Cox, S.L. Forman, T.L. Foti, T.A. Wasklewicz, and A.T. McColgan. 2009. Relict nebkhas (pimple mounds) record prolonged late Holocene drought in the forested region of south-central United States. Quaternary Res. 71: 329–339.

Turner, B.L., H. Nichols, G. Denny, O. Doron. 2003. Atlas of the Vascular Plants of Texas. Volume 1. Sida Bot. Miscell. 24: 1–648.

USDA, NRCS. 2014. The PLANTS Database. National Plant Data Team, Greensboro, North Carolina. <http://plants.usda.gov> Accessed November 2014.

Zenni, R.D. and S.R. Ziller. 2011. An overview of invasive plants of Brazil. Revista Brasil. Bot. 34: 431–446.